STREP-

TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)

(31673)

48

150

100

65

44 310

### SNAKE RIVER MAIN STEM

# 13069500 SNAKE RIVER NEAR BLACKFOOT, ID--Continued WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962-1973, 1975-1981, July 1989 to current year.

PERIOD OF DAILY RECORD .--

WATER TEMPERATURE: June to September 1994, May to September, 1996 (discontinued).

INSTUMENTATION .-- Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 22.5 °C Aug. 2-4, 1994.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 22.2 °C July 27.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS CHAR INS CUB FEI PE SECO (000	GE, SPE- T. CIFI IC CON- ET DUCT R ANCE DND (US/C	C WHOLE FIELD (STAND- ARD M) UNITS)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (0.3 0)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
APR 25	0945	13000	354	8.1	6.0	6.0	5.5	12.3	115	K22
MAY 29	1030	18700	282	8.1	13.5	11.5	15	8.6	93	44
JUN 21	0845	16500	270	8.1	15.5	13.5	19	8.0	91	100
JUL 18	1215	5210	310	8.2	16.0	16.5	3.4	7.7	92	59
AUG 22	1110	1780	341	8.3	15.5	16.0	0.9	7.9	94	40
SEP 19	1015	4900	363	8.0	9.5	11.0	1.3	8.7	93	160
DATE SEP 19	HAR NE: TOT (MG A: CAC( (009	SS PAL H/L S O3)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICA BONA WATI WH F FIEI MG/L HCO (004	TE ER ET LD AS 1 3	ALKA- LINITY WAT WH FOT FET FIELD MG/L AS CACO3 (00410)
DATE	SULF DIS SOLY (MG AS S	S- VED 5/L 504)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (7.3 0)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (7.3 1)	SOLII DIS SOLV (TOI PEI AC-F (7.3	- ED NS R	SOLIDS, DIS- SOLVED (TONS PER DAY) (7.3 2)
SEP 19		31	9.0	0.7	14	204	201		.28	2700
DATE	NITI GEI NITR DIS SOLI (MG AS	RO- N, LITE S- VED L	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SED: MEN: SUS PEND (MG/ (801	[- [, ( - ED L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
APR 25		<0.01	0.18	<0.015	0.2	0.05	<0.	01 36	;	1260
MAY 29		<0.01	0.15	0.030	0.3	0.07	0.			4240
JUN 21		<0.01	0.09	0.030	0.2	0.04	0.		)	2230
JUL 18		<0.01	0.24	0.030	<0.2	0.02	0.	01 32	2	450
AUG 22		<0.01	0.26	<0.015	<0.2	<0.01	<0.	01 8	3	38
SEP 19		<0.01	0.28	<0.015	<0.2	0.01	<0.	01 16	;	212
V D16	_ 1									

K Results based on counts outside ideal colony range.

### 13069500 SNAKE RIVER NEAR BLACKFOOT, ID--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		APRIL			MAY			JUNE	
1							13.6	11.1	12.4
2							14.6 15.4	12.1 12.8	13.3 14.2
4							16.8	13.8	15.1
5							16.5	13.8	15.0
6 7									
8									
9 10							18.2	15.5	16.7
11							17.7	15.2	16.4
12							17.3	14.9	16.0
13 14							17.1 17.6	14.9 15.0	16.0 16.3
15							17.4	15.4	16.4
16							17.4	15.4	16.4
17 18							17.3 16.4	15.0 14.1	16.1 15.0
19							15.2	13.0	14.1
20							14.9	13.0	14.0
21 22							15.8	13.3 13.6	14.5 14.7
23							15.8 16.1	13.6	14.8
24 25							16.1 16.8	14.1 13.9	15.1 15.3
26 27							16.5 16.8	14.7 14.7	15.7 15.8
28 29							15.9 16.3	14.4 13.9	15.1 15.0
30				12.4	10.2	14.7	16.3	13.9	15.5
31				13.2	10.8	11.9			
MONTH									
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN JULY	MEAN		MIN AUGUST	MEAN		MIN SEPTEMBI	
DAY	MAX		MEAN			MEAN			
1	MAX 17.7		MEAN 16.5	20.2	AUGUST	19.5	18.4	SEPTEMBI	ER 17.1
1 2 3	17.7 	JULY 15.2 	16.5 	20.2 20.5 19.4	AUGUST 18.5 18.2 17.3	19.5 19.3 18.2	18.4 17.9 18.1	15.8 15.4 15.4	17.1 16.6 16.7
1 2	17.7	JULY 15.2	16.5	20.2 20.5	AUGUST 18.5 18.2	19.5 19.3	18.4 17.9	SEPTEMBE 15.8 15.4	17.1 16.6
1 2 3 4 5	17.7   	JULY 15.2  	16.5   	20.2 20.5 19.4 17.9 17.9	18.5 18.2 17.3 15.8 15.4	19.5 19.3 18.2 16.9 16.6	18.4 17.9 18.1 18.4 17.0	15.8 15.4 15.4 15.4 15.8 14.8	17.1 16.6 16.7 17.0 16.2
1 2 3 4 5	17.7   	JULY  15.2	16.5   	20.2 20.5 19.4 17.9 17.9	18.5 18.2 17.3 15.8 15.4	19.5 19.3 18.2 16.9 16.6	18.4 17.9 18.1 18.4 17.0	15.8 15.4 15.4 15.8 14.8 13.3 13.9	17.1 16.6 16.7 17.0 16.2 14.8 15.2
1 2 3 4 5	17.7   	JULY  15.2	16.5   	20.2 20.5 19.4 17.9 17.9	18.5 18.2 17.3 15.8 15.4 15.2 15.2	19.5 19.3 18.2 16.9 16.6	18.4 17.9 18.1 18.4 17.0 16.3 16.5	15.8 15.4 15.4 15.8 14.8 13.3 13.9 13.9	17.1 16.6 16.7 17.0 16.2 14.8 15.2 15.2
1 2 3 4 5 6 7 8	17.7   	JULY  15.2	16.5    	20.2 20.5 19.4 17.9 17.9 17.4 18.4	18.5 18.2 17.3 15.8 15.4	19.5 19.3 18.2 16.9 16.6	18.4 17.9 18.1 18.4 17.0	15.8 15.4 15.4 15.8 14.8 13.3 13.9	17.1 16.6 16.7 17.0 16.2 14.8 15.2
1 2 3 4 5 6 7 8 9 10	17.7	JULY  15.2	16.5    	20.2 20.5 19.4 17.9 17.9 17.4 18.4 19.5 20.0	18.5 18.2 17.3 15.8 15.4 15.2 16.3 17.3	19.5 19.3 18.2 16.9 16.6 16.4 16.7 17.9 18.5	18.4 17.9 18.1 18.4 17.0 16.3 16.5 16.6 17.4	15.8 15.4 15.4 15.8 14.8 13.3 13.9 13.9 14.4 15.0	17.1 16.6 16.7 17.0 16.2 14.8 15.2 15.2 15.8 16.2
1 2 3 4 5 6 7 8 9 10	17.7	JULY  15.2	16.5   	20.2 20.5 19.4 17.9 17.9 17.4 18.4 19.5 20.0	18.5 18.2 17.3 15.8 15.4 15.2 15.2 16.3 17.3	19.5 19.3 18.2 16.9 16.6 16.4 16.7 17.9 18.5	18.4 17.9 18.1 18.4 17.0 16.3 16.5 16.6 17.4 17.3	15.8 15.4 15.4 15.4 15.8 14.8 13.3 13.9 13.9 14.4 15.0	17.1 16.6 16.7 17.0 16.2 14.8 15.2 15.8 16.2
1 2 3 4 5 6 7 8 9 10	17.7	15.2     	16.5	20.2 20.5 19.4 17.9 17.9 17.4 18.4 19.5 20.0	18.5 18.2 17.3 15.8 15.4 15.2 16.3 17.3	19.5 19.3 18.2 16.9 16.6 16.4 16.7 17.9 18.5	18.4 17.9 18.1 18.4 17.0 16.3 16.5 16.6 17.4 17.3	15.8 15.4 15.4 15.8 14.8 13.3 13.9 14.4 15.0 16.0 14.9 16.3	17.1 16.6 16.7 17.0 16.2 14.8 15.2 15.8 16.2 16.4 17.0 16.2
1 2 3 4 5 6 7 8 9 10	17.7	15.2    	16.5	20.2 20.5 19.4 17.9 17.9 17.4 18.4 19.5 20.0	18.5 18.2 17.3 15.8 15.4 15.2 16.3 17.3	19.5 19.3 18.2 16.9 16.6 16.4 16.7 17.9 18.5	18.4 17.9 18.1 18.4 17.0 16.3 16.5 16.6 17.4 17.3	15.8 15.4 15.4 15.4 15.8 14.8 13.3 13.9 13.9 14.4 15.0	17.1 16.6 16.7 17.0 16.2 14.8 15.2 15.2 15.8 16.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	17.7	JULY  15.2	16.5       	20.2 20.5 19.4 17.9 17.9 17.4 18.4 19.5 20.0	18.5 18.2 17.3 15.8 15.4 15.2 16.3 17.3	19.5 19.3 18.2 16.9 16.6 16.4 16.7 17.9 18.5	18.4 17.9 18.1 18.4 17.0 16.3 16.5 16.6 17.4 17.3 16.8 17.9 16.8 16.3	15.8 15.4 15.4 15.4 15.8 14.8 13.3 13.9 14.4 15.0 16.0 14.9 16.3 15.6 14.6	17.1 16.6 16.7 17.0 16.2 14.8 15.2 15.8 16.2 16.4 17.0 16.2 15.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	17.7	JULY  15.2	16.5	20.2 20.5 19.4 17.9 17.9 17.4 18.4 19.5 20.0	18.5 18.2 17.3 15.8 15.4 15.2 16.3 17.3 	19.5 19.3 18.2 16.9 16.6 16.4 16.7 17.9 18.5	18.4 17.9 18.1 18.4 17.0 16.3 16.5 16.6 17.4 17.3 16.8 17.9 17.9 16.8 16.3	15.8 15.4 15.4 15.8 14.8 13.3 13.9 13.9 14.4 15.0 16.0 14.9 16.3 15.6 14.6	17.1 16.6 16.7 17.0 16.2 14.8 15.2 15.2 15.8 16.2 16.4 17.0 16.2 15.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	17.7       19.7	JULY  15.2	16.5	20.2 20.5 19.4 17.9 17.9 17.4 18.4 19.5 20.0	AUGUST  18.5 18.2 17.3 15.8 15.4 15.2 16.3 17.3	19.5 19.3 18.2 16.9 16.6 16.4 16.7 17.9 18.5	18.4 17.9 18.1 18.4 17.0 16.3 16.5 16.6 17.4 17.3 16.8 17.9 17.9 17.9 16.8 16.3	15.8 15.4 15.4 15.4 15.8 14.8 13.3 13.9 14.4 15.0 16.0 14.9 16.3 15.6 14.6	17.1 16.6 16.7 17.0 16.2 14.8 15.2 15.8 16.2 16.4 16.4 17.0 16.2 15.4 13.8 12.8 12.8 12.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	17.7 19.7	JULY  15.2	16.5 18.1 17.8	20.2 20.5 19.4 17.9 17.9 17.4 18.4 19.5 20.0	AUGUST  18.5 18.2 17.3 15.8 15.4 15.2 16.3 17.3	19.5 19.3 18.2 16.9 16.6 16.4 16.7 17.9 18.5	18.4 17.9 18.1 18.4 17.0 16.3 16.5 16.6 17.4 17.3 16.8 17.9 17.9 16.8 16.3	15.8 15.4 15.4 15.4 15.8 14.8 13.3 13.9 13.9 14.4 15.0 16.3 15.6 14.6 13.0 12.2 11.4 11.1	17.1 16.6 16.7 17.0 16.2 14.8 15.2 15.2 15.8 16.2 16.4 17.0 16.2 15.4 12.8 12.8 12.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	17.7 19.7 19.2 19.5 20.2	JULY  15.2	16.5 18.1 17.8 17.8 18.2	20.2 20.5 19.4 17.9 17.9 17.4 18.4 19.5 20.0	AUGUST  18.5 18.2 17.3 15.8 15.4 15.2 16.3 17.3	19.5 19.3 18.2 16.9 16.6 16.4 16.7 17.9 18.5	18.4 17.9 18.1 18.4 17.0 16.3 16.5 16.6 17.4 17.3 16.8 17.9 17.9 17.9 16.8 16.3 15.1 13.8 12.7 12.4 13.3	15.8 15.4 15.4 15.4 15.4 15.8 14.8 13.3 13.9 14.4 15.0 16.3 15.6 14.9 16.3 15.6 14.6	17.1 16.6 16.7 17.0 16.2 14.8 15.2 15.8 16.2 16.4 17.0 16.4 17.0 16.4 17.0 16.4 17.0 16.2 11.8 12.8 12.8 12.8 12.8 12.8 12.8 12
1 2 3 4 4 5 5 6 6 7 8 9 9 10 11 12 13 14 15 15 16 17 18 19 20 21 22 23	17.7 19.7 19.5 20.2 20.7	JULY  15.2 16.3 16.1 16.0 16.5 16.8	16.5 18.1 17.8 17.8 18.2 18.7	20.2 20.5 19.4 17.9 17.9 17.4 18.4 19.5 20.0	AUGUST  18.5 18.2 17.3 15.8 15.4 15.2 16.3 17.3 16.1	19.5 19.3 18.2 16.9 16.6 16.4 16.7 17.9 18.5 18.1	18.4 17.9 18.1 18.4 17.0 16.3 16.5 16.6 17.4 17.3 16.8 17.9 17.9 16.8 16.3 15.1 13.8 12.7 12.4 13.3	15.8 15.4 15.4 15.4 15.8 14.8 13.3 13.9 13.9 14.4 15.0 16.3 15.6 14.6 13.0 12.2 11.4 11.1 11.1	17.1 16.6 16.7 17.0 16.2 14.8 15.2 15.2 15.2 16.4 17.0 16.2 15.2 12.2 11.8 12.2 11.9 12.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	17.7 19.7 19.5 20.2 20.7	JULY  15.2	16.5 18.1 17.8 17.8 18.2	20.2 20.5 19.4 17.9 17.9 17.4 18.4 19.5 20.0	AUGUST  18.5 18.2 17.3 15.8 15.4 15.2 16.3 17.3 16.1	19.5 19.3 18.2 16.9 16.6 16.4 16.7 17.9 18.5 18.1 18.5	18.4 17.9 18.1 18.4 17.0 16.3 16.5 16.6 17.4 17.3 16.8 17.9 17.9 16.8 16.3 15.1 13.8 12.7 12.4 13.3	15.8 15.4 15.4 15.4 15.4 15.8 14.8 13.3 13.9 14.4 15.0 16.3 15.6 14.9 16.3 15.6 14.6	17.1 16.6 16.7 17.0 16.2 14.8 15.2 15.8 16.2 16.4 17.0 16.4 17.0 16.4 17.0 16.4 17.0 16.2 11.8 12.8 12.8 12.8 12.8 12.8 12.8 12
1 2 2 3 4 4 5 5 6 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	17.7 19.7 19.2 19.5 20.2 20.7 20.8 21.7	JULY  15.2 16.3 16.1 16.0 16.5 16.8 18.1 18.4	16.5 18.1 17.8 17.8 18.2 18.7 19.4 19.8	20.2 20.5 19.4 17.9 17.9 17.4 18.4 19.5 20.0 	AUGUST  18.5 18.2 17.3 15.8 15.4 15.2 16.3 17.3 16.1 16.3 16.8	19.5 19.3 18.2 16.9 16.6 16.4 16.7 17.9 18.5 18.1 18.5 18.7 18.6	18.4 17.9 18.1 18.4 17.0 16.3 16.5 16.6 17.4 17.3 16.8 16.3 15.1 13.8 12.7 12.4 13.3 14.2 13.9 13.2 12.6 13.2	15.8 15.4 15.4 15.8 14.8 13.3 13.9 14.4 15.0 16.0 14.9 16.3 15.6 14.6 13.0 12.2 11.4 11.1 11.1	17.1 16.6 16.7 17.0 16.2 15.2 15.8 16.2 16.4 17.0 16.2 15.4 13.8 12.2 11.9 12.2 11.9 12.2
1 2 3 4 4 5 5 6 6 7 8 8 9 10 11 12 13 14 15 15 16 17 18 19 20 21 22 23 24 25 26 27	17.7 19.7 19.2 19.5 20.2 20.7 20.8 21.7	JULY  15.2 16.3 16.1 16.0 16.5 16.8 18.1 18.4	16.5 18.1 17.8 17.8 18.2 18.7 19.4 19.8	20.2 20.5 19.4 17.9 17.9 17.4 18.4 19.5 20.0     20.2 20.7 20.5	AUGUST  18.5 18.2 17.3 15.8 15.4 15.2 16.3 17.3 16.1 16.3 16.8 16.8 17.9	19.5 19.3 18.2 16.9 16.6 16.4 16.7 17.9 18.5 18.1 18.5 18.7 18.6 19.0	18.4 17.9 18.1 18.4 17.0 16.3 16.5 16.6 17.4 17.3 16.8 17.9 17.9 17.9 16.8 16.3 15.1 13.8 12.7 12.4 13.3 14.2 13.9 13.2 12.6 13.2	15.8 15.4 15.4 15.4 15.4 15.8 14.8 13.3 13.9 14.4 15.0 16.3 15.6 14.9 16.3 11.4 11.1 11.1 12.2 11.4 11.1 11.1	17.1 16.6 16.7 17.0 16.2 14.8 15.2 15.8 16.2 16.4 17.0 16.2 15.4 17.0 16.3 17.0 18.2 19.8 19.2 19.2 19.2 19.2 19.2 19.2 19.2 19.2
1 2 3 3 4 5 5 6 6 7 8 8 9 10 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	17.7 19.7 19.5 20.2 20.7 20.8 21.7	JULY  15.2 16.3 16.1 16.0 16.5 16.8 18.1 18.4	16.5 18.1 17.8 17.8 18.2 18.7 19.4 19.8	20.2 20.5 19.4 17.9 17.4 18.4 19.5 20.0     20.2 20.7 20.5 20.5 20.0	AUGUST  18.5 18.2 17.3 15.8 15.4 15.2 16.3 17.3 16.1 16.3 16.8 17.9 16.5	19.5 19.3 18.2 16.9 16.6 16.4 16.7 17.9 18.5 18.1 18.5 18.7 18.6 19.0 18.2 18.3	18.4 17.9 18.1 18.4 17.0 16.3 16.5 16.6 17.4 17.3 16.8 17.9 17.9 16.8 16.3 15.1 13.8 12.7 12.4 13.3 14.2 13.9 13.2 12.6 13.2	15.8 15.4 15.4 15.4 15.8 14.8 13.3 13.9 14.4 15.0 16.0 14.9 16.3 15.6 14.6 13.0 12.2 11.4 11.1 11.1 11.1 12.4 12.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0	17.1 16.6 16.7 17.0 16.2 15.2 15.8 16.2 16.4 17.0 16.2 15.4 13.8 12.2 11.9 12.2 13.2 13.2 13.2 13.2 14.8 12.2 15.4 15.2 15.4 17.0 16.2 17.4 18.4 19.4 19.4 19.4 19.4 19.4 19.4 19.4 19
1 2 3 4 4 5 5 6 6 7 8 9 9 10 11 12 13 14 15 15 16 17 18 19 20 21 22 23 24 25 26 27 28	17.7 19.7 19.2 19.5 20.2 20.7 20.8 21.7	JULY  15.2 16.3 16.1 16.0 16.5 16.8 18.1 18.4	16.5 18.1 17.8 17.8 17.8 19.4 19.8	20.2 20.5 19.4 17.9 17.9 17.4 18.4 19.5 20.0     20.2 20.7 20.5 20.2 20.5 20.2	AUGUST  18.5 18.2 17.3 15.8 15.4 15.2 16.3 17.3 16.1 16.3 16.8 17.9 16.9 16.5 17.1	19.5 19.3 18.2 16.9 16.6 16.4 16.7 17.9 18.5 18.1 18.5 18.7 18.6 19.0 18.2 18.3	18.4 17.9 18.1 18.4 17.0 16.3 16.5 16.6 17.4 17.3 16.8 17.9 17.9 16.8 16.3 15.1 13.8 12.7 12.4 13.3 14.2 13.9 13.2 12.6 13.2	15.8 15.4 15.4 15.4 15.4 15.8 14.8 13.3 13.9 13.9 14.4 15.0 16.3 15.6 14.6 13.0 12.2 11.4 11.1 11.1 11.1 11.1 11.1 11.1	17.1 16.6 16.7 17.0 16.2 14.8 15.2 15.2 15.2 15.2 15.2 15.2 15.2 16.4 17.0 16.2 11.3 12.8 12.2 11.9 12.2 11.9 12.1 12.4 11.2
1 2 3 4 4 5 5 6 6 7 8 8 9 10 11 12 13 14 15 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	17.7 19.7 19.2 19.5 20.2 20.7 20.8 21.7	JULY  15.2 16.3 16.1 16.0 16.5 16.8 18.1 18.4 18.7 19.2 19.0 18.9	16.5 18.1 17.8 17.8 18.2 18.7 19.4 19.8 20.5 19.9 19.8 20.2	20.2 20.5 19.4 17.9 17.9 17.4 18.4 19.5 20.0     20.2 20.7 20.5 20.5 20.2 19.5 20.0	AUGUST  18.5 18.2 17.3 15.8 15.4 15.2 16.3 17.3 16.1 16.3 16.8 17.9 16.9 16.5 17.1	19.5 19.3 18.2 16.9 16.6 16.4 16.7 17.9 18.5 18.1 18.5 18.7 18.6 19.0 18.2 18.3 18.5 18.1	18.4 17.9 18.1 18.4 17.0 16.3 16.5 16.6 17.4 17.3 16.8 17.9 17.9 16.8 16.3 15.1 13.8 12.7 12.4 13.3 14.2 13.9 13.2 14.2 13.9 13.2 14.2 13.2 13.2 12.6 13.2 12.4 13.2	15.8 15.4 15.4 15.4 15.4 15.8 14.8 13.3 13.9 13.9 14.4 15.0 16.3 15.6 14.6 12.2 11.4 11.1 11.1 12.4 11.1 11.1	17.1 16.6 16.7 17.0 16.2 15.2 15.8 16.2 15.8 16.2 15.4 12.8 12.2 12.1 12.4 13.8 12.2 11.9 12.2 13.0 12.0 12.1 12.4

### 13069500 SNAKE RIVER NEAR BLACKFOOT ID--Continued

BIOLOGICAL DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	O)	RGANISM	V.	INDI- IDUALS IN AMPLE (NO.) 31614)	WEIGHT SAMPLE BIOTA TISSUE COMP. AVERAGE (GRAMS) (01373)	LENGTH SAMPLE BIOTA TISSUE COMP. AVERAGE (CM) (01371)	ALUM NUM BIOTI TISSU DRY W REC (UG/0	, MC A, BI IE, TIS IGT DRY ! F G) (U	OTA, SSUE, S WGT I REC G/G)	ARSENIC BIOTA, FISSUE, DRY WGT REC (UG/G) (49247)	BARIUM, BIOTA, TISSUE, DRY WGT REC (UG/G) (49238)
SEP 10	1000	Utah	sucker liv	rer	5	1595	55	<1	.0 <	0.2	1.0	<0.1-
DATE		BERYL- LIUM-, BIOTA, TISSUE, DRY WGT REC (UG/G) (49248)	BORON, BIOTA, TISSUE, DRY WGT REC (UG/G) (49239)	CADMIUM BIOTA, TISSUE, DRY WGT REC (UG/G) (49249)	CHROM- IUM-, BIOTA, TISSUE, DRY WGT REC (UG/G) (49240)	COBALT BIOTA TISSUE DRY WG' REC (UG/G) (49250	BIOTA, , TISSUE T DRY WG REC (UG/G)	BIOT , TISS T DRY REG (UG/	TA, BI UE, TI WGT DR C	EAD, IOTA, I SSUE, I Y WGT D REC JG/G)	IANGAN- ESE, BIOTA, 'ISSUE, 'PY WGT REC (UG/G) 49243)	MERCURY BIOTA, TISSUE, DRY WGT REC (UG/G) (49258)
SEP 10		<0.2	0.3	1.6	0.6	0.2	87	92	0	<0.2	9.3	1
DATE		MOLYB- DENUM, BIOTA, TISSUE, DRY WGT REC (UG/G) (49252)	NICKEL, BIOTA, TISSUE, DRY WGT REC (UG/G) (49253)	BIO' TISS DRY RE (UG	M, SI FA, B: SUE, TI WGT DR SC (G) (1	LLVER, IOTA, SSUE, LY WGT REC UG/G) 19255)	STRON- TIUM, BIOTA, TISSUE, DRY WGT REC (UG/G) (49244)	VANA- DIUM BIOTA, TISSUE, DRY WGT REC (UG/G) (49465)	ZINC BIOTA TISSUI DRY W REC (UG/G	A, BIO E, TIS GT DRY R S) (UC	NIUM DTA, SUE, WGT EC G/G) 257)	WATER, PRESENT BIO TIS DRY WGT REC PERCENT (49273)
SEP 10		1.0	<0.2	5.	. 3	1.2	0.4	0.4	170		<0.2	78
DATE	TIME	ORGÆ	NISM	INDI- VIDUALS IN SAMPLE (NO.) (81614)	WEIGHT SAMPLE BIOTA TISSUE COMP. AVERAGE (GRAMS) (01373)	LENGTH SAMPLE BIOTA TISSUE COMP. AVERAGE (CM) (01371)	ALDRIN, BIOTA, WH ORG WW, REC (UG/KG) (49353)	CIS- CHLOR- DANE, BIOTA, WH ORG WW, REC (UG/KG) (49380)	TRANS- CHLOR- DANE, BIOTA, WH ORG WW, REC (UG/KG) (49379)	DCPA, BIOTA, WH ORG WW, REC (UG/KG) (49378)	O,P'- DDT, BIOTA, WH ORG WW, REC (UG/KG) (49377)	WW, REC (UG/KG)
10	1000	Utah	sucker	7	1459	46	<5.00	<5.00	<5.00	<5.00	<5.00	13.0
	P,P'- DDD, BIOTA, WH ORG WW, REG (UG/KG) (49375)	C WW, RE ) (UG/KG	DDE, , BIOTA, G WH ORG C WW, REC	(UG/KG)	WW, REC (UG/KG)	(UG/KG)	HEPTA- CHLOR CHLOR, BIOTA, WH ORG WW, REC (UG/KG) (49369)	BENZENE HEXA- EPOXIDE BIOTA, WH ORG WW, REC (UG/KG) (49368)	ALPHA- CHLORO- BIOTA, WH ORG WW, REC (UG/KG) (49367)	BETA- BHC, BIOTA, WH ORG WW, REC (UG/KG) (49366)	DELTA- BHC, BIOTA, WH ORG WW, REC (UG/KG) (49365)	BHC, BIOTA, WH ORG WW, REC (UG/KG) (49364)
SEP 10	E17.0	<5.00	<5.00	250	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
DATE	BI WH WW (UC	NDANE OTA, ORG , REC W	CHLOR, (C),P'-, I BIOTA, I WH ORG W WW, REC W UG/KG) (	UG/KG)	MIREX, BIOTA, WH ORG WW, REC (UG/KG) (49360)	CIS- NONA- CHLOR, BIOTA, WH ORG WW, REC (UG/KG) (49359)	TRANS- NONA- CHLOR, BIOTA, WH ORG WW, REC (UG/KG) (49358)	OXY- CHLOR DANE, BIOTA, WH ORG WW, REC (UG/KG) (49357)	PENTA CHLORO ANISOLE BIOTA, WH ORG WW, REC (UG/KG) (49356)	PCB, BIOTA, WH ORG WW, REC (UG/KG) (49354)	TOXA- PHEME, BIOTA, WH ORG WW, REC (UG/KG) (49355)	LIPIDS, BIOTA, WH ORG WW, REC PERCENT (49289)
SEP 10	<	5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	60.0	<200	16.0

#### 13069500- SNAKE RIVER NEAR BLACKFOOT, ID--Continued

BIOLOGICAL DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

FISH COLLECTION DATA

COLLECTION METHODS.--Electrofishing; backpack (11A), boat (13A).

LENGTH OF REACH.--885 m.

TIME ELAPSED FOR EACH COLLECTION METHOD.--Backpack (11A)-0.17 hours; boat (13A)-0.61 hours.

ANOMALY CODES.--AA-none; DE-deformities; ER-eroded fins; LE-lesions; TU-tumors; AL-anchor worms; BL-black spot; CL-leeches; IC-ich; NE-blind; PA-other parasites; PE-popeye.

HABITAT QUALITY INDEX.--NA.

REMARKS .-- Large river.

ORGANISM FAMILY GENUS SPECIES (COMMON)	DATE	NUMBER OF INDIV- IDUALS	PERCENT COMPO- SITION	LENGTH RANGE TOTAL MM	WEIGHT RANGE IN GM	ORIGIN	TROPHIC GROUP OF ADULTS	TEMPER- ATURE PREFER- ENCE	NUMBER AND TYPE OF ANOMALY
	Sept. 10								
Catostomidae (Suckers)	_								
Catostomus platyrhync (Mountain sucker)	hus	1	0.44	198	98	NATIVE	HERBIVORE	COLD	1-DE
Catostomus ardens		1	0.44	190	90	NAIIVE	HERBIVORE	COLD	I-DE
(Utah sucker)		25	11.1	42-596	1-2245	NATIVE	OMNIVORE	WARM	1-TU, 1-LE 4-NE, 1-DE 18-AA
Cottidae (Sculpins)									
Cottus bairdi									
(Mottled sculpin)		26	11.5	40-112	1-25	NATIVE	INVERTIVORE	COLD	26-AA
Cyprinidae (Carps and mi	innows)								
(Common Carp)		2	0.88	595-765	4300-7500	INTRODUCED	OMNIVORE	WARM	2-AA
Richardsonius balteat	us								
(Redside shiner)		39	17.2	41-95	1-8	NATIVE	INVERTIVORE	COLD	39-AA
Rhynichthys osculus		1.4	6 10	21 55	1 5	****		gor p	14.33
(Speckled dace)		14	6.19	31-77	1-5	NATIVE	INVERTIVORE	COLD	14-AA
Percidae (Perches)									
Perca flavescens									
(Yellow perch)		38	16.8	74-163	4-58	INTRODUCED	INVERTIVORE	COOL	38-AA
Salmonidae (Trouts) Salmo trutta									
(Brown trout) Prosopium williamsoni		39	17.2	72-178	4-60	INTRODUCED	INVERTIVORE	COLD	39-AA
(Mountain whitefish		33	14.6	91-463	5-813	NATIVE	INVERTIVORE	COLD	1-LE, 1-ER
Oncorhynchus mykiss s									31-AA
(Rainbow trout)		9	3.98	150-335	41-150	<sup>a</sup> INTRODUCED	INVERTIVORE	COLD	9-AA
TOTAL NUMBER OF TAXA 1 TOTAL INDIVIDUALS 2	0 26								

a-Rainbow trout are considered native in Idaho downstream of Shoshone Falls and introduced upstream of Shoshone Falls.

### 13069500 SNAKE RIVER NEAR BLACKFOOT, ID--Continued

#### WATER-QUALITY RECORDS

COLLECTION METHODS.--Composite of 5,  $0.25~\text{m}^2$  samples. Richest targeted habitat--riffles, whole sample. MESH SIZE.--425 um.

AVERAGE DEPTH.--0.31 m.

AVERAGE PERCENT SHADING .-- 9.

AVERAGE VELOCITY .-- 0.64 m/s.

SUBSTRATE EMBEDDEDNESS CLASS RANGE.--4.

PERCENT FINES RANGE.--0-10.

HABITAT QUALITY INDEX.--NA.

REMARKS.--Large river, riffles uncommon.

#### BIOLOGICAL DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996 BENTHIC INVERTEBRATE COLLECTION DATA

ORGANISM TAXON GENUS SPECIES DATE	NUMBER OF INDIV- IDDIALS	PERCENT COMPO- SITION	FUNC- TIONAL FEEDING GROUP	POLLU- TION TOLER- ANCE VALUE
SEP. 10	IDOALD	BIIION	GROOT	VALOE
NON-INSECTS Oligochaeta Sphaeriidae Ferrissia Fluminicola Stagnicola coperata	56.25 18.75 37.5 18.75 243.8	0.56 0.19 0.38 0.19	CG CG SC SC SC	5 8 6 8
Vorticifix effusa Ostracoda Acari	18.75 18.75 93.75	0.19 0.19 0.94	SC CG PA	6 8 5
EPHEMEROPTERA Acentrella turbida Baetis tricaudatus Ephemerella inermis/infrequens Heptagenia Rhithrogena Stenonema Choroterpes Tricorythodes minutus	225 375 2381 56.25 300 56.25 18.75 56.25	2.26 3.77 23.92 0.56 3.01 0.56 0.19	CG CG CG SC SC SC CG	4 6 1 4 0 5 7 4
<b>PLECOPTERA</b> Claassenia sabulosa Perlodidae-early instar Isoperla	18.75 18.75 281.3	0.19 0.19 2.82	PR PR PR	3 2 2
TRICHOPTERA Protoptila Hydropsyche Hydroptila Ceraclea Psychomyia	18.75 1294 37.5 18.75 112.5	0.19 12.99 0.38 0.19 1.13	SC CF PH OM SC	1 4 6 3 2
LEPIDOPTERA Petrophila	300	3.01	SC	5
COLEOPTERA Optioservus	18.75	0.19	SC	4
<b>DIPTERA</b> Simuliidae	18.75	0.19	CF	6
CHIRONOMIDAE Chironomidae-pupae Cricotopus Cricotopus Bicinctus Gr. Cricotopus Trifascia Gr. Dicrotendipes Eukiefferiella Orthocladius Complex Paratanytarsus Polypedilum Rheotanytarsus	318.8 1313 150 1313 112.5 37.5 168.8 75 318.8 37.5	3.2 13.18 1.51 13.18 1.13 0.38 1.69 0.75 3.2	UN CG CG CG CG OM CG UN OM CF	6 7 7 6 8 8 6 6 6

TOTAL NUMBER OF TAXA 37 EPT ABUNDANCE  $5268/m^2$  TOTAL NUMBER OF ORGANISMS  $9957/m^2$  NUMBER EPT TAXA 16 HILSENHOFF BIOTIC INDEX 4.25 SHANNON DIVERSITY INDEX (H) 3.78

### 13069500 SNAKE RIVER NEAR BLACKFOOT, ID--Continued

COLLECTION METHODS.--Qualitative multiple habitat, relative abundance, whole sample.

MESH SIZE .-- 210 um.

GEAR TYPE.--D-frame net and visual collections.

REACH LENGTH.--885 m.

AVERAGE WIDTH.--90 m  $_{\rm e}$ .

HABITAT QUALITY INDEX.--NA.

REMARKS.-- Large river, riffles uncommon.

#### BIOLOGICAL DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996 BENTHIC INVERTEBRATE COLLECTION DATA

				POLLU-
	NUMBER		FUNC-	TION
ORGANISM	OF	PERCENT	TIONAL	TOLER-
TAXON	INDIV-	COMPO-	FEEDING	ANCE
GENUS SPECIES DATE	IDUALS	SITION	GROUP	VALUE
SEP. 10				
NON-INSECTS	1.2	0.20	7.7	5
Nematoda Oligochaeta	12 210	0.39 6.9	PA CG	5
Hirudinea	6	0.2	PR	10
Sphaeriidae	42	1.38	CG	8
Ferrissia	6	0.2	sc	6
Fluminicola	6	0.2	SC	8
Stagnicola coperata	234	7.69	CG	6
Physella integra	42 36	1.38	CG	8
Copepoda Ostracoda	36	1.18	CG CG	8 8
Acari	6	0.33	PA	5
ACGII	0	0.2	FA	3
ODONTA				
Ophiogomphus	6	0.2	PR	4
EPHEMEROPTERA				
Baetis tricaudatus	42	1.38	CG	6
Centroptilum	48	1.58	CG	2
Ephemerella inermis/infrequens	156	5.13	CG	1
Heptagenia	6	0.2	SC	4
Choroterpes	6	0.2	CG	7
Paraleptophlebia	96	3.16	CG	4
Tricorythodes minutus	210	6.9	CG	4
PLECOPTERA				
Isoperla	12	0.39	PR	2
TRICHOPTERA				
Brachycentrus occidentalis	6	0.2	OM	1
Hydropsyche	90	2.96	CF	4
Psychomyia	6	0.2	SC	2
LEPIDOPTERA				
Petrophila	12	0.39	SC	5
-				
COLEOPTERA	_			
Optioservus	6	0.2	SC	4
DIPTERA				
Tipulidae	6	0.2	UN	3
Tipula	6	0.2	OM	4
CHIRONOMIDAE				
Chironomidae-pupae	42	1.38	UN	6
Chironomus	102	3.35	CG	10
Cricotopus	216	7.1	CG	7
Cricotopus Bicinctus Gr.	48	1.58	CG	7
Cricotopus Trifascia Gr.	36	1.18	CG	6
Dicrotendipes	648 18	21.3	CG OM	8
Eukiefferiella Parakiefferiella	18	0.59 0.59	OM CG	8 4
Paratanytarsus	234	7.69	UN	6
Phaenopsectra	216	7.1	SC	7
Polypedilum	48	1.58	OM	6
Pseudosmittia	18	0.59	UN	6
Tanytarsus	18	0.59	CF	6
Thienemannimyia Gr.	36	1.18	PR	6
TOTAL NUMBER OF TAXA	41	יים	PT ABUNDANCE	678
	142		UMBER EPT TAXA	11
HILLSENHOFF BIOTIC INDEX	6.12	Si	HANNON DIVERSITY IN	IDEA (H) 4.21

e Estimated

### 13069500 SNAKE RIVER NEAR BLACKFOOT, ID--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAY	MAX	MIN	ME	AN		MAX	MIN	MEAN			
		MAY					JUNE				
1						13.4 13.2	10.3 10.7				
2						13.2	10.7				
4			-			12.7	10.9	11.8			
5						12.9	10.9	11.8			
6			-			13.4	10.9	12.1			
7 8						13.4 13.8	11.3 11.8				
9						12.3	11.3				
10			-			11.3	9.6	10.6			
11			_			10.9	9.2	10.0			
12						10.9	8.9	9.9			
13 14						10.6 10.1	9.8 9.0				
15						10.7	8.6				
16						10.7	8.9	9.9			
17			_			11.0	9.5				
18						11.5	8.9				
19 20						12.1 13.2	9.3 10.9				
21 22						12.3 11.3	11.2 10.1				
23						10.3	9.2				
24						11.5	9.2				
25						12.6	9.9	11.3			
26			-			12.0	11.2				
27 28						12.4 12.9	10.4 10.4				
29			-			13.7	11.5	12.5			
30 31						14.1 14.4	12.0 12.0				
31						11.1	12.0	13.1			
MONTH						14.4	8.6	11.2			
MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
MAX	MIN JUNE	MEAN	MAX	MIN	MEAN	MAX	MIN AUGUST	MEAN		MIN SEPTEMBE	
	JUNE			JULY			AUGUST			SEPTEMBE	R
14.3 14.1	JUNE 12.0 12.4	13.1 13.3	19.1 19.9	JULY 16.0 16.5	17.5 18.2	20.3 20.5	AUGUST 18.1 18.3	19.3 19.4	20.8	SEPTEMBE 17.8 17.8	R 19.2 19.2
14.3 14.1 13.7	JUNE 12.0 12.4 12.6	13.1 13.3 13.0	19.1 19.9 20.3	JULY 16.0 16.5 17.1	17.5 18.2 18.7	20.3 20.5 20.8	AUGUST 18.1 18.3 18.4	19.3 19.4 19.7	20.8 20.7 21.0	SEPTEMBE 17.8 17.8 17.9	R 19.2 19.2 19.4
14.3 14.1	JUNE 12.0 12.4 12.6	13.1 13.3	19.1 19.9 20.3 19.9	JULY 16.0 16.5	17.5 18.2	20.3 20.5 20.8 21.3	AUGUST 18.1 18.3	19.3 19.4 19.7	20.8	17.8 17.8 17.9 18.3	R 19.2 19.2
14.3 14.1 13.7 12.7	JUNE 12.0 12.4 12.6 11.5 10.3	13.1 13.3 13.0 12.0 11.4	19.1 19.9 20.3 19.9 19.2	JULY 16.0 16.5 17.1 17.1	17.5 18.2 18.7 18.5 18.2	20.3 20.5 20.8 21.3 22.0	AUGUST  18.1  18.3  18.4  18.9  19.2	19.3 19.4 19.7 20.1 20.6	20.8 20.7 21.0 20.8 19.9	17.8 17.8 17.8 17.9 18.3 18.4	R 19.2 19.2 19.4 19.4 19.1
14.3 14.1 13.7 12.7 12.6	JUNE 12.0 12.4 12.6 11.5	13.1 13.3 13.0 12.0	19.1 19.9 20.3 19.9 19.2	JULY 16.0 16.5 17.1 17.1	17.5 18.2 18.7 18.5	20.3 20.5 20.8 21.3 22.0	AUGUST  18.1  18.3  18.4  18.9	19.3 19.4 19.7 20.1	20.8 20.7 21.0 20.8	SEPTEMBE 17.8 17.8 17.9 18.3 18.4	R 19.2 19.2 19.4 19.4
14.3 14.1 13.7 12.7 12.6 13.2 13.2	JUNE 12.0 12.4 12.6 11.5 10.3 10.9 11.6 11.3	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5	19.1 19.9 20.3 19.9 19.2 19.1 18.3 19.1	JULY 16.0 16.5 17.1 17.1 17.0 16.6 16.5 16.3	17.5 18.2 18.7 18.5 18.2 17.8 17.5	20.3 20.5 20.8 21.3 22.0 22.7 22.5 22.7	AUGUST  18.1 18.3 18.4 18.9 19.2  19.7 19.7 19.4	19.3 19.4 19.7 20.1 20.6 21.1 21.1 20.9	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5	SEPTEMBE 17.8 17.8 17.9 18.3 18.4 17.9 17.9 18.3	19.2 19.2 19.4 19.4 19.1 18.7 18.9
14.3 14.1 13.7 12.7 12.6 13.2 13.2 14.0	JUNE 12.0 12.4 12.6 11.5 10.3	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8	19.1 19.9 20.3 19.9 19.2 19.1 18.3 19.1	JULY 16.0 16.5 17.1 17.1 17.0	17.5 18.2 18.7 18.5 18.2	20.3 20.5 20.8 21.3 22.0 22.7 22.5 22.7 22.7	AUGUST  18.1  18.3  18.4  18.9  19.2  19.7  19.7	19.3 19.4 19.7 20.1 20.6	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1	SEPTEMBE 17.8 17.8 17.9 18.3 18.4 17.9 17.9	19.2 19.2 19.4 19.4 19.1
14.3 14.1 13.7 12.7 12.6 13.2 13.2 14.0 13.5 14.4	JUNE 12.0 12.4 12.6 11.5 10.3 10.9 11.6 11.3 12.3	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3	19.1 19.9 20.3 19.9 19.2 19.1 18.3 19.1 19.1	JULY 16.0 16.5 17.1 17.1 17.0 16.6 16.5 16.3 16.3	17.5 18.2 18.7 18.5 18.2 17.8 17.5 17.7 17.8 17.4	20.3 20.5 20.8 21.3 22.0 22.7 22.5 22.7 22.5	AUGUST  18.1 18.3 18.4 18.9 19.2  19.7 19.7 19.4 19.2 18.9	19.3 19.4 19.7 20.1 20.6 21.1 21.1 20.9 20.8 20.5	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1	SEPTEMBE  17.8 17.9 18.3 18.4  17.9 17.9 17.9 18.3 18.1 17.3	19.2 19.2 19.4 19.4 19.1 18.7 18.9 18.9 18.6 17.7
14.3 14.1 13.7 12.7 12.6 13.2 13.2 14.0 13.5 14.4	JUNE 12.0 12.4 12.6 11.5 10.3 10.9 11.6 11.3 12.3 12.3	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3	19.1 19.9 20.3 19.9 19.2 19.1 18.3 19.1 18.3	JULY 16.0 16.5 17.1 17.1 17.0 16.6 16.5 16.3 16.8	17.5 18.2 18.7 18.5 18.2 17.8 17.5 17.7 17.8 17.4	20.3 20.5 20.8 21.3 22.0 22.7 22.5 22.7 22.5	AUGUST  18.1 18.3 18.4 18.9 19.2  19.7 19.7 19.4 19.2 18.9  19.2	19.3 19.4 19.7 20.1 20.6 21.1 21.1 20.9 20.8 20.5	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1	SEPTEMBE  17.8 17.9 18.3 18.4  17.9 18.3 18.1	19.2 19.2 19.4 19.4 19.1 18.7 18.9 18.6 17.7
14.3 14.1 13.7 12.7 12.6 13.2 14.0 13.5 14.4	JUNE 12.0 12.4 12.6 11.5 10.3 10.9 11.6 11.3 12.3 12.3 12.3 12.3	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3 13.6 14.3 14.7	19.1 19.9 20.3 19.9 19.2 19.1 18.3 19.1 18.3 18.9 18.9	JULY 16.0 16.5 17.1 17.0 16.6 16.5 16.3 16.3 16.3 16.3	17.5 18.2 18.7 18.5 18.2 17.8 17.5 17.7 17.8 17.4	20.3 20.5 20.8 21.3 22.0 22.7 22.5 22.7 22.5 22.7 22.5	AUGUST  18.1  18.3  18.4  18.9  19.2  19.7  19.7  19.4  19.2  18.9  19.2  19.5  19.5	19.3 19.4 19.7 20.1 20.6 21.1 21.1 20.9 20.8 20.5	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1	17.8 17.8 17.9 18.3 18.4 17.9 17.9 18.3 18.1 17.3 16.6 16.3 16.0	19.2 19.2 19.4 19.4 19.1 18.7 18.9 18.6 17.7
14.3 14.1 13.7 12.7 12.6 13.2 13.2 14.0 13.5 14.4	JUNE 12.0 12.4 11.5 10.3 10.9 11.6 11.3 12.3 12.3 12.3	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3 14.3 14.7	19.1 19.9 20.3 19.9 19.2 19.1 18.3 19.1 19.1 18.3	JULY 16.0 16.5 17.1 17.0 16.6 16.5 16.3 16.3 16.8	17.5 18.2 18.7 18.5 18.2 17.8 17.5 17.7 17.8 17.4 17.5 17.3 18.0 18.5	20.3 20.5 20.8 21.3 22.0 22.7 22.5 22.7 22.5 22.7 23.0 23.0 22.8	AUGUST  18.1  18.3  18.4  18.9  19.2  19.7  19.7  19.7  19.8  19.2  19.5  19.5  19.5	19.3 19.4 19.7 20.1 20.6 21.1 21.1 20.9 20.8 20.5	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1	17.8 17.8 17.9 18.3 18.4 17.9 17.9 18.3 18.1 17.3	19.2 19.2 19.4 19.4 19.1 18.7 18.9 18.6 17.7
14.3 14.1 13.7 12.7 12.6 13.2 13.2 14.0 13.5 14.4 14.6 15.5 15.4 15.9	JUNE 12.0 12.4 12.6 11.5 10.3 10.9 11.3 12.3 12.3 12.3 12.3 12.4 13.2 13.7 14.0 13.2	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3 13.6 14.3 14.7 14.8 13.8	19.1 19.9 20.3 19.9 19.2 19.1 18.3 19.1 19.1 18.3 18.9 19.7 20.0 20.5	JULY 16.0 16.5 17.1 17.1 17.0 16.6 16.5 16.3 16.3 16.3 16.3 16.8	17.5 18.2 18.7 18.5 18.2 17.8 17.7 17.8 17.4 17.5 17.3 18.0 18.5 18.8	20.3 20.5 20.8 21.3 22.0 22.7 22.5 22.7 22.7 22.5 22.7 22.5 22.7 22.5 22.8 21.0	AUGUST  18.1  18.3  18.4  18.9  19.2  19.7  19.4  19.2  18.9  19.2  19.5  19.5  19.5	19.3 19.4 19.7 20.1 20.6 21.1 21.1 20.9 20.8 20.5 20.8 21.2 21.2 21.0 20.2	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1 18.4 17.9 18.1 18.6 18.9	SEPTEMBE 17.8 17.9 18.3 18.4 17.9 17.9 17.9 17.9 17.9 17.9 16.3 16.6 16.3 16.8	19.2 19.2 19.4 19.4 19.1 18.7 18.9 18.6 17.7 17.6 17.0 17.0
14.3 14.1 13.7 12.7 12.6 13.2 13.2 14.0 13.5 14.4 14.6 15.5 15.4 15.9 14.4	JUNE 12.0 12.4 12.6 11.5 10.3 10.9 11.6 11.3 12.3 12.3 12.3 12.3 12.4 13.2 13.7 14.0 13.2	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3 13.6 14.3 14.7 14.8 13.8	19.1 19.9 20.3 19.9 19.2 19.1 18.3 18.9 18.9 18.9 19.7 20.0 20.5	JULY 16.0 16.5 17.1 17.1 17.0 16.6 16.5 16.3 16.8 16.2 15.7 16.3 16.8	17.5 18.2 18.7 18.5 18.2 17.8 17.5 17.7 17.8 17.4 17.5 17.3 18.0 18.5 18.8	20.3 20.5 20.8 21.3 22.0 22.7 22.5 22.7 22.5 22.7 23.0 23.0 22.8 21.0	AUGUST  18.1  18.3  18.4  18.9  19.2  19.7  19.7  19.7  19.9  19.2  19.5  19.5  19.5  19.5  19.5	19.3 19.4 19.7 20.1 20.6 21.1 21.1 20.9 20.8 20.5 20.8 21.2 21.2 21.0 20.2	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1 18.4 17.9 18.1 18.6 18.9	SEPTEMBE 17.8 17.8 17.9 18.3 18.4 17.9 17.9 17.3 18.1 17.3 16.6 16.3 16.0 16.3 16.8	19.2 19.2 19.4 19.4 19.1 18.7 18.9 18.6 17.7 17.6 17.0 17.5 17.9
14.3 14.1 13.7 12.7 12.6 13.2 14.0 13.5 14.4 14.6 15.5 15.4 15.9 14.4	JUNE 12.0 12.4 11.5 10.3 10.9 11.6 11.3 12.3 12.3 12.4 13.2 13.7 14.0 13.2 12.4 13.5	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3 14.3 14.3 14.7 14.8 13.8	19.1 19.9 20.3 19.9 19.2 19.1 18.3 19.1 19.1 18.3 18.9 19.7 20.0 20.5	JULY 16.0 16.5 17.1 17.1 17.0 16.6 16.5 16.3 16.3 16.3 16.8 17.0	17.5 18.2 18.7 18.5 18.2 17.8 17.5 17.7 17.8 17.4 17.5 18.0 18.5 18.8	20.3 20.5 20.8 21.3 22.0 22.7 22.7 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.5	AUGUST  18.1  18.3  18.4  18.9  19.2  19.7  19.4  19.2  18.9  19.5  19.5  19.5  19.5  19.7	19.3 19.4 19.7 20.1 20.6 21.1 21.1 21.2 20.9 20.8 20.5 20.8 21.2 21.2 21.0 20.2	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1 18.4 17.9 18.1 18.6 18.6 19.2	SEPTEMBE 17.8 17.9 18.3 18.4 17.9 17.9 17.9 18.3 18.1 17.3 16.6 16.3 16.8 17.3 17.4 16.5	19.2 19.2 19.4 19.4 19.1 18.7 18.9 18.6 17.7 17.6 17.0 17.5 17.9
14.3 14.1 13.7 12.7 12.6 13.2 13.2 14.0 13.5 14.4 14.6 15.5 15.4 15.9 14.4	JUNE 12.0 12.4 12.6 11.5 10.3 10.9 11.6 11.3 12.3 12.3 12.3 12.4 13.2 13.7 14.0 13.2 12.4 11.6 11.5	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3 13.6 14.3 14.7 14.8 13.8	19.1 19.9 20.3 19.9 19.2 19.1 18.3 18.9 18.9 18.9 19.7 20.0 20.5	JULY 16.0 16.5 17.1 17.1 17.0 16.6 16.5 16.3 16.8 16.2 15.7 16.3 16.8	17.5 18.2 18.7 18.5 18.2 17.8 17.5 17.7 17.8 17.4 17.5 18.0 18.5 18.8	20.3 20.5 20.8 21.3 22.0 22.7 22.5 22.7 22.8 22.7 22.8 22.7 22.8 22.8 22.8	AUGUST  18.1 18.3 18.4 18.9 19.2  19.7 19.7 19.7 19.9 19.2 19.5 19.5 19.5 19.5 19.5 19.6 18.9  18.6 18.9 17.9	19.3 19.4 19.7 20.1 20.6 21.1 21.1 20.9 20.8 20.5 20.8 21.2 21.2 21.0 20.2	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1 18.4 17.9 18.8 18.6 18.6 18.6 18.6	17.8 17.8 17.9 18.3 18.4 17.9 17.9 17.9 17.3 16.6 16.3 16.0 16.3 16.8	19.2 19.2 19.4 19.4 19.1 18.7 18.9 18.6 17.7 17.6 17.0 17.5 17.9
14.3 14.1 13.7 12.7 12.6 13.2 13.2 14.0 13.5 14.4 14.6 15.5 15.4 15.9 14.4	JUNE 12.0 12.4 12.6 11.5 10.3 10.9 11.6 11.3 12.3 12.3 12.3 12.4 13.2 13.7 14.0 13.2 12.4 11.6 11.5	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3 13.6 14.3 14.7 14.8 13.8	19.1 19.9 20.3 19.9 19.2 19.1 18.3 19.1 19.1 18.3 18.9 19.7 20.0 20.5	JULY 16.0 16.5 17.1 17.1 17.0 16.6 16.5 16.3 16.3 16.3 16.8 17.0	17.5 18.2 18.7 18.5 18.2 17.8 17.5 17.7 17.8 17.4 17.5 18.0 18.5 18.8	20.3 20.5 20.8 21.3 22.0 22.7 22.7 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.5 22.0 23.0 23.0 23.0 22.8 21.0 23.0 23.0 23.0 23.0 23.0 23.0 23.0 23	AUGUST  18.1  18.3  18.4  18.9  19.2  19.7  19.4  19.2  18.9  19.5  19.5  19.5  19.5  19.7  19.7  19.7  19.7  19.7  19.7  19.7  19.7  19.7  19.7  19.7	19.3 19.4 19.7 20.1 20.6 21.1 21.1 21.2 20.9 20.8 20.5 20.8 21.2 21.2 21.0 20.2	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1 18.4 17.9 18.8 18.6 18.6 18.6 18.6	SEPTEMBE 17.8 17.9 18.3 18.4 17.9 17.9 17.9 18.3 18.1 17.3 16.6 16.3 16.8 17.3 17.4 16.5	19.2 19.2 19.4 19.4 19.1 18.7 18.9 18.6 17.7 17.6 17.0 17.5 17.9
14.3 14.1 13.7 12.7 12.6 13.2 13.2 14.0 13.5 14.4 14.6 15.5 15.4 15.9 14.4 14.0 12.7 13.7 13.7 15.1	JUNE 12.0 12.4 12.6 11.5 10.3 10.9 11.6 11.3 12.3 12.3 12.4 13.2 13.7 14.0 13.2 12.4 11.6 11.5 12.0 12.1	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3 13.6 14.3 14.7 14.8 13.8 13.0 12.1 12.5 12.8 13.6	19.1 19.9 20.3 19.9 19.2 19.1 18.3 18.9 18.9 18.9 19.7 20.0 20.5	JULY 16.0 16.5 17.1 17.1 17.0 16.6 16.5 16.3 16.8 16.2 15.7 16.3 16.8 17.0	17.5 18.2 18.7 18.5 18.2 17.8 17.5 17.7 17.8 17.4 17.5 18.0 18.5 18.8	20.3 20.5 20.8 21.3 22.0 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.5 22.9 23.0 23.0 22.8 21.0 21.2 20.5 19.2	AUGUST  18.1  18.3  18.4  18.9  19.2  19.7  19.7  19.7  19.5  19.5  19.5  19.5  19.5  19.6  17.6  17.6	19.3 19.4 19.7 20.1 20.6 21.1 21.1 20.9 20.8 20.5 20.8 21.2 21.2 21.0 20.2 19.9 19.6 18.7 18.6 18.4	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1 18.4 17.9 18.1 18.6 18.9	SEPTEMBE  17.8 17.9 18.3 18.4  17.9 17.9 18.3 18.1 17.3 16.6 16.3 16.8 17.3 17.4 16.5 15.2 14.8	19.2 19.2 19.4 19.4 19.1 18.7 18.9 18.6 17.7 17.6 17.0 17.5 17.9 18.3 18.1 17.5 17.9
14.3 14.1 13.7 12.7 12.6 13.2 14.0 13.5 14.4 14.6 15.5 15.4 15.9 14.4 14.0 12.7 13.7 15.1	JUNE 12.0 12.4 12.6 11.5 10.3 10.9 11.6 11.3 12.3 12.3 12.4 13.2 12.4 13.2 12.4 11.5 12.0 12.1	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3 13.6 14.7 14.8 13.8 13.0 12.1 12.5 12.8 13.6	19.1 19.9 20.3 19.9 19.2 19.1 18.3 19.1 19.1 20.0 20.5	JULY 16.0 16.5 17.1 17.1 17.0 16.6 16.5 16.3 16.8 16.2 15.7 16.8 17.0	17.5 18.2 18.7 18.5 18.2 17.8 17.7 17.8 17.4 17.5 17.3 18.0 18.5 18.8	20.3 20.5 20.8 21.3 22.0 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.5 21.0 21.2 20.5 19.2 19.2 19.2	AUGUST  18.1 18.3 18.4 18.9 19.2  19.7 19.7 19.4 19.2 18.9  19.2 19.5 19.5 19.5 19.5 19.6 17.6 17.4 17.3	19.3 19.4 19.7 20.1 20.6 21.1 21.1 20.9 20.8 20.5 20.8 21.2 21.2 21.0 20.2 19.9 19.6 18.7 18.6 18.4	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1 18.4 17.9 18.1 18.6 18.9 19.2 18.6 18.4 16.6	17.8 17.8 17.9 18.3 18.4 17.9 17.9 18.3 18.1 17.3 16.6 16.3 16.8 17.3 16.5 11.4 16.5 11.4 11.5 11.5 11.5 11.5 11.5 11.5 11	19.2 19.2 19.4 19.4 19.1 18.7 18.9 18.6 17.7 17.6 17.0 17.5 17.9 18.3 18.1 17.5 17.9
14.3 14.1 13.7 12.7 12.6 13.2 14.0 13.5 14.4 14.6 15.5 15.4 15.9 14.4 14.0 12.7 13.7 15.1	JUNE 12.0 12.4 12.6 11.5 10.3 10.9 11.6 11.3 12.3 12.3 12.4 13.2 12.4 13.2 12.4 11.5 12.0 12.1	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3 13.6 14.7 14.8 13.8 13.0 12.1 12.5 12.8 13.6	19.1 19.9 20.3 19.9 19.2 19.1 18.3 19.1 19.1 20.0 20.5	JULY 16.0 16.5 17.1 17.1 17.0 16.6 16.5 16.3 16.8 16.2 15.7 16.8 17.0	17.5 18.2 18.7 18.5 18.2 17.8 17.7 17.8 17.4 17.5 17.3 18.0 18.5 18.8	20.3 20.5 20.8 21.3 22.0 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.5 21.0 21.2 20.5 19.2 19.2 19.2	AUGUST  18.1  18.3  18.4  18.9  19.2  19.7  19.7  19.7  19.2  18.9  19.2  19.5  19.5  19.5  19.5  19.6  17.6  17.6  17.6  17.6  17.4  17.3  17.1  16.3	19.3 19.4 19.7 20.1 20.6 21.1 21.1 20.9 20.8 20.5 20.8 21.2 21.0 20.2 19.6 18.7 18.6 18.4 18.3 18.4 18.3	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1 18.4 17.9 18.1 18.6 18.9 19.2 18.6 18.6 18.6 16.5 16.6	SEPTEMBE  17.8 17.8 17.9 18.3 18.4  17.9 17.9 18.3 18.1 17.3 16.6 16.3 16.8 17.3 16.8 17.4 16.5 15.2 14.8	19.2 19.2 19.4 19.4 19.4 19.1 18.7 18.9 18.6 17.7 17.6 17.0 17.5 17.9 18.3 18.1 17.5 17.9
14.3 14.1 13.7 12.7 12.6 13.2 14.0 13.5 14.4 14.6 15.5 15.4 15.9 14.4 14.0 12.7 13.7 15.1	JUNE 12.0 12.4 12.6 11.5 10.3 10.9 11.6 11.3 12.3 12.3 12.4 13.2 12.4 13.2 12.4 11.5 12.0 12.1	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3 14.7 14.8 13.8 13.6 14.7 14.8 13.8	19.1 19.9 20.3 19.9 19.2 19.1 18.3 19.1 19.1 20.0 20.5	JULY 16.0 16.5 17.1 17.1 17.0 16.6 16.5 16.3 16.8 16.2 15.7 16.8 17.0	17.5 18.2 18.7 18.5 18.2 17.8 17.7 17.8 17.4 17.5 17.3 18.0 18.5 18.8	20.3 20.5 20.8 21.3 22.0 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.5 21.0 21.2 20.5 19.2 19.2 19.2	AUGUST  18.1  18.3  18.4  18.9  19.2  19.7  19.7  19.7  19.2  18.9  19.2  19.5  19.5  19.5  19.5  19.6  17.6  17.6  17.6  17.6  17.4  17.3  17.1  16.3	19.3 19.4 19.7 20.1 20.6 21.1 21.1 20.9 20.8 20.5 20.8 21.2 21.2 21.2 21.0 20.2	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1 18.4 17.9 18.1 18.6 18.9 19.2 18.6 18.6 18.6 16.5 16.6	17.8 17.8 17.9 18.3 18.4 17.9 17.9 18.3 18.1 17.3 16.6 16.3 16.0 16.3 16.0 16.3 16.0 14.3 17.4 16.5 15.2 14.8	19.2 19.2 19.4 19.4 19.4 19.1 18.7 18.9 18.6 17.7 17.6 17.0 17.5 17.9 18.3 18.1 17.5 17.9
14.3 14.1 13.7 12.7 12.6  13.2 14.0 13.5 14.4  14.6 15.5 15.4 15.9 14.4  14.0 12.7 13.7 13.7 15.1  15.7 16.2 16.8 16.8 15.7	JUNE 12.0 12.4 12.6 11.5 10.3 10.9 11.6 11.3 12.3 12.3 12.4 13.2 13.7 14.0 13.2 12.4 11.6 11.5 12.0 12.1 12.9 14.0 14.4 14.0 13.2	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3 13.6 14.3 14.7 14.8 13.8 13.0 12.1 12.5 12.8 13.6 14.6 14.4 15.6 14.6 14.6	19.1 19.9 20.3 19.9 19.2 19.1 18.3 18.9 18.9 18.9 20.0 20.5	JULY 16.0 16.5 17.1 17.1 17.0 16.6 16.5 16.3 16.8 16.2 15.7 16.3 16.8 17.0	17.5 18.2 18.7 18.5 18.2 17.8 17.7 17.8 17.7 17.8 17.4 17.5 18.0 18.5 18.8 20.5 20.2 20.4	20.3 20.5 20.8 21.3 22.0 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.5 21.0 21.2 20.5 19.2 19.9 19.2	AUGUST  18.1  18.3  18.4  18.9  19.2  19.7  19.7  19.4  19.2  18.9  19.5  19.5  19.5  19.5  19.6  17.6  17.6  17.6  17.4  17.3  17.1  16.3  16.3	19.3 19.4 19.7 20.1 20.6 21.1 21.1 20.9 20.8 20.5 20.8 21.2 21.0 20.2 19.9 19.6 18.7 18.6 18.4 18.3 18.4 18.0 17.5 17.7	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1 18.4 17.9 18.1 18.6 18.9 19.2 18.6 16.5 16.6	SEPTEMBE  17.8 17.9 18.3 18.4  17.9 17.9 18.3 18.1 17.3 16.6 16.3 16.8 17.3 16.5 15.2 14.8 14.4 14.1 14.0 14.3 14.4	19.2 19.2 19.4 19.4 19.4 19.1 18.7 18.9 18.6 17.7 17.6 17.0 17.5 17.9 18.3 18.1 15.6 14.9 14.8 14.9 14.8 14.9
14.3 14.1 13.7 12.7 12.6 13.2 13.2 14.0 13.5 14.4 14.6 15.5 15.4 15.9 14.4 15.9 14.4 16.0 12.7 13.7 15.1 16.8 16.8 16.8 15.7	JUNE 12.0 12.4 11.5 10.3 10.9 11.6 11.3 12.3 12.3 12.4 13.2 13.7 14.0 13.2 12.4 11.6 11.5 12.0 12.1 12.9 14.0 14.4 14.4 14.0 13.2 13.2	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3 13.6 14.3 14.7 14.8 13.8 13.0 12.1 12.5 12.8 13.6 14.6 14.1 15.6 14.6	19.1 19.9 20.3 19.9 19.2 19.1 18.3 19.1 19.1 20.0 20.5	JULY 16.0 16.5 17.1 17.1 17.0 16.6 16.5 16.3 16.8 16.2 15.7 16.8 17.0	17.5 18.2 18.7 18.5 18.2 17.8 17.5 17.7 17.8 17.4 17.5 18.0 18.5 18.8	20.3 20.5 20.8 21.3 22.0 22.7 22.5 22.7 22.5 22.7 23.0 23.0 22.8 21.0 21.2 20.5 19.2 19.9 19.2	AUGUST  18.1 18.3 18.4 18.9 19.2 19.7 19.7 19.7 19.8 19.2 19.5 19.5 19.5 19.5 19.6 17.6 17.6 17.6 17.6 17.6 17.8 16.3	19.3 19.4 19.7 20.1 20.6 21.1 21.1 20.9 20.8 20.5 20.8 21.2 21.0 20.2 19.6 18.7 18.6 18.4 18.3 18.4 18.3 17.5 17.7	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1 18.4 17.9 18.1 18.6 18.9 19.2 18.6 18.5 16.6	17.8 17.8 17.9 18.3 18.4 17.9 17.3 18.1 17.3 16.6 16.3 16.8 17.3 16.5 11.4 16.5 11.4 11.4 11.4 11.4 11.4 11.4 11.4 11	19.2 19.2 19.4 19.4 19.1 18.7 18.9 18.6 17.7 17.6 17.0 17.5 17.9 18.3 18.1 17.5 17.6 17.5 17.9
14.3 14.1 13.7 12.7 12.6  13.2 14.0 13.5 14.4  14.6 15.5 15.4 15.9 14.4  14.0 12.7 13.7 15.1  15.7 16.2 16.8 16.8 15.7	JUNE 12.0 12.4 12.6 11.5 10.3 10.9 11.6 11.3 12.3 12.3 12.4 13.2 13.7 14.0 13.2 12.4 11.6 11.5 12.0 12.1 12.9 14.0 14.4 14.0 13.2 12.1	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3 14.7 14.8 13.8 13.6 14.7 14.8 13.8 13.6 14.1 12.5 12.8 13.6 14.6 14.6	19.1 19.9 20.3 19.9 19.2 19.1 18.3 19.1 19.1 20.0 20.5	JULY 16.0 16.5 17.1 17.1 17.0 16.6 16.5 16.3 16.8 16.2 15.7 16.3 16.8 17.0	17.5 18.2 18.7 18.5 18.2 17.8 17.5 17.7 17.8 17.4 17.5 18.0 18.5 18.8	20.3 20.5 20.8 21.3 22.0 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.5 22.7 22.9 23.0 23.0 22.8 21.0 21.2 20.5 19.2 19.9 19.2 19.7 18.9 18.7 18.9 19.2 19.2 19.2 19.2 19.5 19.5 19.5 19.5 19.5 19.5	AUGUST  18.1  18.3  18.4  18.9  19.2  19.7  19.7  19.4  19.2  19.5  19.5  19.5  19.5  19.6  17.6  17.6  17.6  17.4  17.3  16.3  16.8  16.8  16.8	19.3 19.4 19.7 20.1 20.6 21.1 21.1 20.9 20.8 20.5 20.8 21.2 21.0 20.2 19.9 19.6 18.7 18.6 18.4 18.3 18.4 18.0 17.5 17.7	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1 18.4 17.9 19.2 18.6 18.9 19.2 18.6 16.5 15.7 15.7 15.9 15.9	SEPTEMBE  17.8 17.9 18.3 18.4  17.9 18.3 18.1 17.3 16.6 16.3 16.8 17.3 16.5 15.2 14.8 14.4 14.1 14.0 14.3 14.4 14.3 14.4 14.3 14.4 14.3 14.4	19.2 19.2 19.4 19.4 19.4 19.1 18.7 18.9 18.6 17.7 17.6 17.0 17.5 17.9 18.3 18.1 17.6 15.8 15.6 14.9 14.8 14.9 14.8 14.9 15.1 15.0
14.3 14.1 13.7 12.7 12.6  13.2 13.2 14.0 13.5 14.4  14.6 15.5 15.4 15.9 14.4  14.0 12.7 13.7 15.1  15.7 16.2 16.8 16.8 15.7	JUNE 12.0 12.4 11.5 10.3 10.9 11.6 11.3 12.3 12.3 12.4 13.2 13.7 14.0 13.2 12.4 11.6 11.5 12.0 12.1 12.9 14.0 14.4 14.0 13.2 12.3 13.7	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3 14.7 14.8 13.8 13.6 14.7 14.8 13.8 13.6 14.1 12.5 12.8 13.6 14.6 14.6	19.1 19.9 20.3 19.9 19.2 19.1 18.3 19.1 19.1 20.0 20.5	JULY 16.0 16.5 17.1 17.1 17.0 16.6 16.5 16.3 16.8 16.2 15.7 16.3 16.8 17.0	17.5 18.2 18.7 18.5 18.2 17.8 17.5 17.7 17.8 17.4 17.5 18.0 18.5 18.8	20.3 20.5 20.8 21.3 22.0 22.7 22.7 22.7 22.7 22.7 22.5 22.7 22.7	AUGUST  18.1  18.3  18.4  18.9  19.2  19.7  19.4  19.2  18.9  19.5  19.5  19.5  19.5  19.6  17.6  17.6  17.6  17.6  17.1  16.3  16.8  16.8  16.0  16.3  16.8	19.3 19.4 19.7 20.1 20.6 21.1 21.9 20.8 20.5 20.8 21.2 21.0 20.2 19.9 19.6 18.7 18.6 18.4 18.3 18.4 18.0 17.5 17.7	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1 18.4 17.9 18.1 18.6 18.9 19.2 18.6 15.5 16.6 15.5 15.7 15.7 15.9 15.9	17.8 17.8 17.9 18.3 18.4 17.9 17.9 17.3 16.6 16.3 16.0 16.3 16.8 17.3 16.5 2 14.4 14.1 14.0 14.3 14.4 14.3 14.4 14.3 14.4 14.3 14.3	19.2 19.2 19.4 19.4 19.1 18.7 18.9 18.6 17.7 17.6 17.0 17.5 17.9 18.3 18.1 17.6 15.6 14.9 14.8 14.9 15.1 15.0
14.3 14.1 13.7 12.7 12.6  13.2 14.0 13.5 14.4  14.6 15.5 15.4 15.9 14.4  14.0 12.7 13.7 15.1  15.7 16.2 16.8 16.8 15.7	JUNE 12.0 12.4 12.6 11.5 10.3 10.9 11.6 11.3 12.3 12.3 12.4 13.2 13.7 14.0 13.2 12.4 11.6 11.5 12.0 12.1 12.9 14.0 14.4 14.0 13.2 12.1	13.1 13.3 13.0 12.0 11.4 12.0 12.4 12.5 12.8 13.3 13.6 14.3 14.7 14.8 13.8 13.0 12.1 12.5 12.8 13.6 14.6 14.1 15.6 14.6 14.6 14.6 15.7 16.8	19.1 19.9 20.3 19.9 19.2 19.1 18.3 19.1 19.1 20.0 20.5	JULY 16.0 16.5 17.1 17.1 17.0 16.6 16.5 16.3 16.8 16.2 15.7 16.3 16.8 17.0	17.5 18.2 18.7 18.5 18.2 17.8 17.5 17.7 17.8 17.4 17.5 18.0 18.5 18.8	20.3 20.5 20.8 21.3 22.0 22.7 22.7 22.7 22.7 22.7 22.5 22.7 22.7	AUGUST  18.1  18.3  18.4  18.9  19.2  19.7  19.7  19.4  19.2  18.9  19.5  19.5  19.5  19.5  19.6  17.6  17.6  17.6  17.6  17.1  16.3  16.3  16.8  16.0  16.3  16.8  17.0  17.3	19.3 19.4 19.7 20.1 20.6 21.1 21.1 20.9 20.8 20.5 20.8 21.2 21.0 20.2 19.9 19.6 18.7 18.6 18.4 18.3 18.4 18.0 17.5 17.7	20.8 20.7 21.0 20.8 19.9 19.7 20.0 19.5 19.1 18.1 18.4 17.9 18.1 18.6 18.9 19.2 18.6 16.5 15.7 15.7 15.9 15.9 15.7	SEPTEMBE  17.8 17.9 18.3 18.4  17.9 18.3 18.1 17.3 16.6 16.3 16.8 17.3 16.5 15.2 14.8 14.4 14.1 14.0 14.3 14.4 14.3 14.4 14.3 14.4 14.3 14.4	19.2 19.2 19.4 19.4 19.4 19.1 18.7 18.9 18.6 17.7 17.6 17.0 17.5 17.9 18.3 18.1 15.6 14.9 14.8 14.9 14.8 14.9 15.1 15.1

DAY

MONTH

#### 13069500 SNAKE RIVER NEAR BLACKFOOT, ID--Continued

#### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962-1973, 1975-1981, July 1989 to September 1996, April to September 1998, April to September 2000 (discontinued).

# PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June to September 1994, May to September 1996, May to September 1998, April to September 2000 (discontinued).

INSTUMENTATION .-- Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 23.1 °C July 31, Aug. 1-2, 2000.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 23.1 °C July 31, Aug. 1-2.

REMARKS .-- Missing data due to equipment malfunction.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	100 ML)
14 27 MAY	1224 1047	7380 7640	 299	8.1	 25.0	9.8	3.2	9.8	101	 K20	 K35
05 18 25 JUN	1045 1219 1441	3990 4770 3210	335 332	8.2 8.4	16.5 21.6	10.8 15.8	2.3 2.1	9.2 10.0	97 120	 K4 K23	 K28 K12
01 08 14 JUL	0945 0915 1430	8290 5760 4880	304 329 338	8.1 8.1 8.5	14.0 27.0 24.0	11.7 15.2 15.1	4.9 2.6 1.6	9.0 8.4 11.6	97 100 135	60 K34 K7	51 K27 K7
05 19 AUG	1158 0845	3450 4170	328 324	8.0 8.1	30.0 20.0	17.8 17.6	2.1 3.3	8.9 7.8	110 95	K25 120	K12 88
10 23 SEP	1305 1547	2170 2110	346 333	8.3 8.5	32.2 26.0	20.4 19.8	.9 <.5	6.7 9.8	87 126	K26 50	K24 K24
13 27	1250 1333	1310 2250	384 370	8.2 8.4	25.5 20.0	15.6 11.9	<.5 .6	7.5 9.0	88 97	K8 K18	K13 100
DATE	HARD- NESS TOTAL (MG/L AS CACO3 (00900	CALC DI SOL (MC ) AS	CIUM S- VED S G/L	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) 00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	POTAS SIUM, DIS- SOLVEI (MG/I AS K)	UNFL' FE' D FIE:	TRD T LD AS I	FET FIELD	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)
SEP 13	160			11.7	, ,	14					129
DATE	2 A	ULFATE DIS- SOLVED (MG/L S SO4) 00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS SILICA DIS- SOLVED (MG/L AS SIO2) (00955	501 / M/	G/L)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLID DIS- SOLVE (TON PER AC-FT (7030	) DAY	r. ()
SEP 13.		33.2	9.9	.7	11.7		1	204		29 74	6
•	DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	GEN MON ORG TO (M	IA + FANIC TAL IG/L N)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEI MEI SU PEN (MG	DI- NT, 'S- IDED !/L) 154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	
	APR 14 27	.169	0	_	- 1.0	.065	.007	50 7 45		996 928	
	MAY 05 18 25 JUN	.077 .035	 .0 .0		- .22 .25	.031 .036	.002			280 180 	
	01 08 14 JUL	.100 .049 .058	.0	06 02 04	.25 .25 .21	.059 .028 .025	.001 .001 <.001	L 18		280 171	
	05 19 AUG	.046 .062	<.0		.23	.024	.003			140 327	
	10 23 SEP	.590 .023	.0	03 06	.21	.016 .021	.001			23 46	
	13 27	.106 .063	.0	03 06	.21	.014	.003			11 55	

K Results based on counts outside ideal colony range.

### 13069500 SNAKE RIVER NEAR BLACKFOOT, ID--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY) (80225)	NUMBER OF SAM- PLING POINTS (COUNT) (00063)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	N SAMPLER I TYPE ) (CODE)	SAM- PLING METHOD, CODES (82398)	BAG MESH SIZE BEDLOAD SAMPLER (MM) (30333)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM (80226)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)
APR										
14 14 MAY	1111 1144	7320 7320	62 51	20 20	304 304	1100 1100	1000 1000	.250 .250	0	0
18 18 JUN	1304 1340	4740 4720	4.9 9.0	20 20	304 304	1100 1100	1000 1000	.250 .250	0	0
08 08 AUG	1030 1102	5760 5760	8.1 8.5	20 20	294 294	1100 1100	1000 1000	.250 .250	0	0
10	1340 1415	2260 2250	.20 .10	20 20	272 272	1100 1100	1000 1000	.250 .250	0	5 6
DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAL SIEVE DIAM. % FINEF THAN 1.00 MM (80230)	BED SI DI % F TH	EVE AM. INER HAN 0 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM (80236)
APR 14	1	47	64	64	1	65	65	78	88	100
14 MAY	2	69	92	92		93	94	99	100	100
18 18 JUN	5 4	86 74	98 98	100		100 100	100 100	100 100	100 100	100 100
08 08 AUG	2 3	79 69	99 98	100		100 100	100 100	100 100	100 100	100 100
10	23 18	73 71	86 88	95 100		100 100	100 100	100 100	100 100	100 100

### 13069500 SNAKE RIVER NEAR BLACKFOOT, ID--Continued

WATER TEMPERATURE, DEGREES CELSIUS, APRIL TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN
		APRIL			MAY	
1				12.5	10.2	11.4
2				12.7	10.5	11.7
3				13.6	11.1	12.3
4				13.6	12.4	13.0
5				13.5	11.6	12.2
6				11.6	10.7	11.0
7				10.8	9.4	9.9
8				10.2	8.7	9.4
9				10.2	9.1	9.7
10				10.7	9.3	10.0
11				10.4	8.3	8.9
12				9.7	7.9	8.6
13				10.2	8.3	9.2
14				11.6	9.3	10.2
15				12.5	10.2	11.3
16				12.4	11.3	11.8
17				11.9	10.8	11.4
18				12.7	10.8	11.6
19				12.7	11.3	12.0
20				13.6	11.6	12.5
21				14.5	12.5	13.4
22				14.5	13.3	14.0
23				15.3	13.5	14.3
24				15.6	14.2	14.9
25				15.5	14.5	15.0
26				15.6	14.4	15.0
27				15.6	13.9	14.8
28	12.1	10.2	11.2	15.5	14.1	14.9
29	11.6	10.0	11.0	15.2	13.6	14.4
30	12.5	10.2	11.3	14.9	13.1	14.1
31				14.5	12.8	13.6
MONTH				15.6	7.9	12.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST		SI	EPTEMBE	R
1	14.2	12.1	13.1	20.0	17.5	18.6	23.1	20.0	21.4	18.4	16.3	17.0
2	14.9	12.7	13.8	19.7	17.5	18.6	23.1	19.8	21.3	16.4	15.5	15.9
3	15.5	13.1	14.3	19.2	17.5	18.3	22.8	19.8	20.8	16.8	14.9	15.7
4	16.4	13.9	15.1	18.0	16.0	16.9	22.8	19.5	20.9	17.4	15.6	16.4
5	16.4	14.4	15.5	18.5	16.1	17.3	21.5	19.3	20.4	16.9	15.6	16.3
6	16.8	14.5	15.6	18.4	16.4	17.4	20.5	18.8	19.7	16.3	15.0	15.7
7	17.2	15.0	16.1	18.8	17.1	17.9	20.8	18.7	19.7	16.6	14.5	15.5
8	16.9	15.3	16.2	19.2	17.4	18.4	20.5	18.7	19.6	16.6	15.0	15.8
9	16.6	14.5	15.3	19.0	17.9	18.5	21.0	19.2	20.0	15.8	14.2	15.0
10	15.2	13.8	14.4	19.0	17.5	17.9	22.0	19.5	20.5	15.6	13.5	14.6
11	15.0	13.5	14.3	19.0	16.8	17.8	21.6	17.2	19.8	16.3	13.9	15.1
12	15.0	13.5	13.9	19.5	17.5	18.6	22.0	15.8	19.1	16.9	14.4	15.6
13	14.9	12.7	13.6	19.7	17.7	18.8	21.8	17.5	19.7	18.2	14.5	16.4
14	15.3	13.3	14.3	19.7	18.5	19.0	22.3	17.1	19.6	18.7	15.0	17.0
15	15.3	14.2	14.9	19.3	18.0	18.7	21.0	17.4	19.4	19.0	15.8	17.5
16	16.1	14.2	15.1	19.7	18.4	19.0	22.0	16.4	19.3	18.8	16.3	17.7
17	16.3	14.5	15.5	19.7	18.7	19.1	21.1	17.1	19.2	19.5	16.9	18.1
18	16.6	14.7	15.6	19.3	17.9	18.6	21.6	17.2	19.4	18.0	16.6	17.4
19	16.4	15.0	15.7	19.5	18.0	18.8	20.6	17.5	19.0	17.2	15.8	16.5
20	16.1	14.5	15.4	19.3	17.7	18.5	19.5	17.2	18.3	16.1	14.2	15.3
21	16.6	14.9	15.7	19.5	17.7	18.6	18.8	16.6	17.8	15.5	14.2	14.8
22	17.4	15.2	16.2				19.8	16.9	18.2	14.2	11.4	12.5
23	18.2	16.4	17.2				19.3	17.4	18.3	11.4	10.4	10.8
24							21.1	17.5	19.1	11.9	10.2	11.0
25							21.1	18.4	19.7	12.2	10.5	11.3
26							21.0	18.5	19.7	12.7	11.0	11.8
27							20.8	18.0	19.4	13.5	11.4	12.4
28							20.1	17.9	18.9	14.1	12.1	13.0
29				22.8	18.8	20.7	20.1	16.9	18.6	14.4	12.8	13.6
30				23.0	19.0	20.9	19.0	17.4	18.0	13.8	12.7	13.1
31				23.1	19.8	21.3	18.2	16.1	17.2			
MONTH							23.1	15.8	19.4	19.5	10.2	15.0